**More About Triangles** Name:

Geometry/Rodriguez Date:

Part 1:

Classify the triangles based on the given information.

1. 2.

 

3. 4.

 

5. 6.

 

Part 2:

Classify the triangles based on the given information. Assume that the triangles are drawn to scale—meaning, for example, if an acute angle looks acute, then it is. If there are any equal sides or angles, they’ll be indicated with a marking. **Explain how you classified the triangles, too!**

1. 2.

 

3. 4.

 

5. 6.

 

Part 3:

(a) Find the missing angle of the triangle. Show what you did!

(b) Classify the triangle. Explain how you did it!

1. 2.

 

3. 4.

 

Part 4:

1. A triangle’s angles measure *x*°, 3*x*°, and *x*°. What is the value of *x*? What is the measure of each angle? What type of triangle is this?

2. A triangle’s angles measure 60°, 2*y*°, and *y*°. What is the value of *y*? What is the measure of each angle? What type of triangle is this?

3. Given the information about the triangle, what classifications are possible? Why / how do you know?

a) an angle of 46° and 72°

b) an angle of 57°

c) an angle of 20°

4. Give an example of each type of triangle, if it’s possible. If the triangle type is impossible to make, then explain why.

a) acute isosceles b) right scalene

c) right equilateral d) obtuse scalene

e) right obtuse f) obtuse isosceles